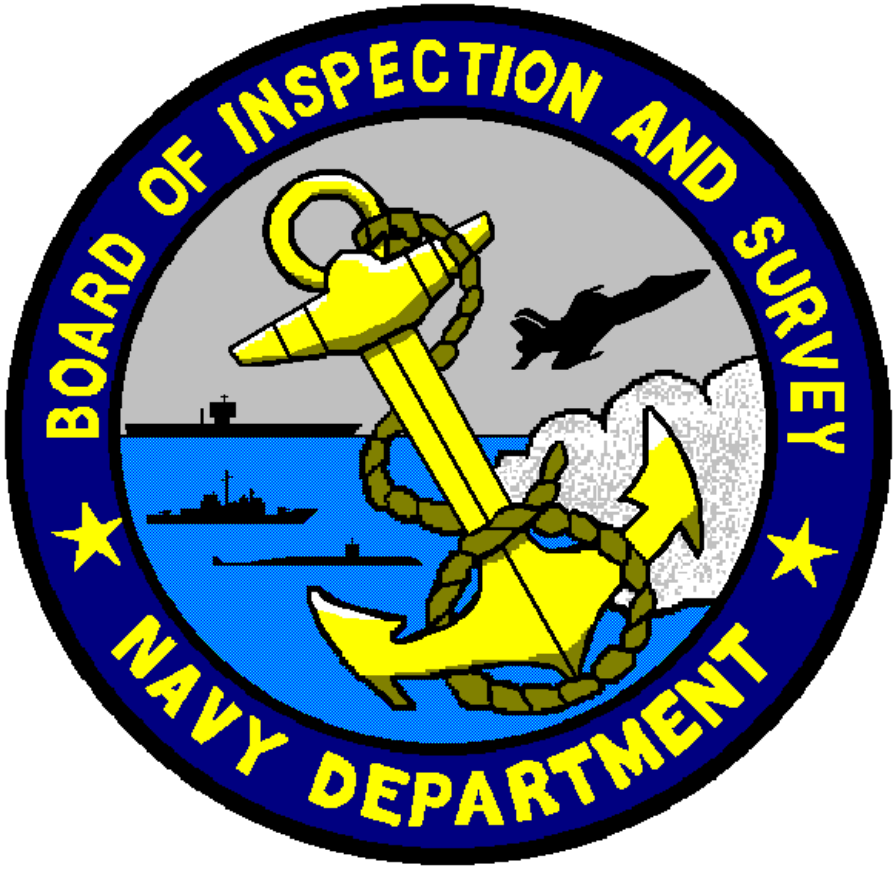

ENGINEERING CHECKS

AOE 6 CLASS

AUXILIARIES (AX)
PRE-UNDERWAY PHASE
AOE 6

ANCHOR WINDLASS	
Check placards/Instructions/lube charts	
Sump levels	
Hydraulic oil condition	
Gauge calibration	
Servo/ replenishment pressure (idle)	
Relief valve data	
Remote operator linkage	
Crossover valve	
Manual brake	
Electric brake	
STEERING	
Sump Level	
Hydraulic Oil/system Condition	
Test main relief valves	
Gauge calibration	
Measure crush block clearances	
Check rudder(follow-up, dynamic/indicator split)	
Trick wheel stops	
Flex hose condition	
Conduct rudder swings/blocking valve test	
ABT	
Emergency steering system	
Steering wrenches	
Telltales	
HIGH PRESSURE AIR SYSTEM	
Sump Level/Oil condition	
Gauge calibration	
Safety shutdowns	
Condensate monitoring	
Relief valve	
HP air flask certification	
CMASS operation	
Compressor temperatures/pressures	

LOW PRESSURE AIR SYSTEM	
Gauge calibration	
CMASS operation	
Safety shut downs	
Relief valves	
Priority valve	
Sea water cooling system	
Ferrous fasteners	
Location of intake vent supply	
Dew point operation	
Timer operation	
FIRE PUMPS/SEA WATER	
MVHC Station	
Pump operation	
Packing/ Mechanical seal	
Remote/local start/ stop functions	
Ferrous fasteners	
Grounding straps/ foundation condition	
DIESEL GENERATORS	
Gauge calibration	
Warning placards	
FO/ LO strainer enclosures	
Safety shutdowns(cold/ hot)	
Foundation	
Pre-lube system	
Sump level	
Oil condition	
Special tools	
CARGO FUEL PUMPS	
Gauge calibration	
Pump operation (local/ remote start/ stop)	
Flexible coupling	
Leaks	
Coupling guards	
Mechanical seal	
Transfer valve operation	
Color coding/pipe labeling	
Safety interlocks	
Control panel	
Hydraulic leaks	

DEHYDRATORS	
Gauge calibration	
Tower operation	
Purge air pressure	
Automatic drain operation	
Dewpoint	
Membrane status	
Tech manual support	
Special tools/ test equipment	

AUXILIARIES (AX)
UNDERWAY PHASE
AOE 6

ANCHOR WINDLASS DEMONSTRATION	
STEERING DEMONSTRATION	
Demonstrate timed rudder swing checks/ blocking valve test Ahead	As per provided procedure
Demonstrate timed rudder swing checks/ blocking valve test Astern	As per provided procedure
WATER PRODUCTION DEMONSTRATION	
Demonstrate 80% water production capability	
Gauge calibration	
Labeling/color coding	
Flow meter	
Salinity indicator	
Dump valves	
Leaks	
Lagging	
Foundation	
WATER HEATERS/ FAN ROOMS	
Gauge calibration	
Relief valve	
Thermostatic control valve	
High temperature light	
High temperature switch	
Drain piping	
Lagging	
Cold water check valve	
Foundation	
Water temperature at basin/spigot	
Fan room zone inspection	
STEAM RISER	
Gauge calibration	
Valve condition	
Warning placard	
Lanyard	
Relief valve	
Preservation	

PACKAGE CONVEYOR/ELEVATOR	
Posted instructions	
Safety switches	
Safety shields	
Indexing feature	
All station e-stop	
Lockable controllers	
Audible alarms	
Door interlocks	
Tech manuals/PMS support	
AC/REFRIGERATION PLANTS	
Freeze box	
Chill box	
Capacity control/PLC operation	
Gauge calibration	
Safety shutdowns	
Sump level	
Oil condition	
Halocarbon monitor	
Moisture indicators	
Chill water system	
Zincs	
WORK SHOPS	
Equipment operation	
Safety devices	

AUXILIARIES (AX)
OPEN AND INSPECT PHASE
AOE 6

EQUIPMENT	NUMBER INSTALLED	NUMBER INSPECTED	INSPECT
Air Conditioning Plant	4	1	Remove zinc access plugs Remove all but 2 bolts from dehydrator housing(cartridge must be removed with inspector present) Remove lube oil filter
Refrigeration Machinery	4	2	Remove lube oil filter Remove all but 2 bolts from dehydrator housing(cartridge must be removed with inspector present)
Anchor Windlass	2	1	Remove HPU suction & discharge filters/strainers Remove access plate to Windlass sump
Steering System	2	1	Remove HPU suction/discharge filters/strainers
Diesel Generator	5	2	Inventory special tools Remove fuel strainer Remove lube oil strainer

AUXILIARY BOILERS (BR)
PRE-UNDERWAY PHASE
AOE 6

AUXILIARY BOILERS	
COLD CHECKS:	
Test F/O safety shutoff/root valve	
Test control air alarms	
Test F/O service tank motor operated bulkhead stop valves	
Test F/O service tank trip valves	
Test steam smothering system	
Test safety valves/hand easing gear	
Test low steam atomizing pressure	
Test feedwater control valve	
Test characterizing relay	
Remotely close auxiliary steam stop valve	
HOT PLANT:	
Test low fuel oil pressure C/O	
Observe steam pressure transmitter	
Test low water level C/O	
Test low water level alarm	
Test high water level alarm	
Test flame failure scanner	
Test high steam pressure C/O	
Test low steam/oil DP	
Low combustion air & blower interlock	
Test emergency stop switch	

AUXILIARY BOILERS	
ALL BOILERS:	
Operate gauge glass hand easing gear	
Test gauge glass lighting	
Inspect bottom blow valves	
Inspect burner barrels	
Inspect gauges	
FEED PUMPS	
Inspect mechanical seal leakage	
Inspect foundation condition	
Inspect coupling guard	
Inspect gauges	
FUEL OIL SERVICE PUMPS	
Inspect mechanical seal leakage	
Inspect gauges	
MISCELLANEOUS	
Boiler inspection device	
Boiler inspection device case	

ADMIN/DOCUMENTATION	
BW/FW records (last 3 months)	
Bottom blow UT records	
Soot blow ppg UT records	
Soot blow head UT records	
Burner barrel hydrotest records	
Boiler workcenter CSMP	
Oil lab workcenter CSMP	
Boiler controls workcenter CSMP	
Boiler related CASREPs	
Boiler related DFSs	
Daily fuel & water report	

AUXILIARY BOILERS (BR)
UNDERWAY PHASE
AOE 6

BOILERS	
Check soot blower operation as soon as possible after underway. **Note: Be prepared to demonstrate soot blower head pressure PMS on one rotating and one stationary head per boiler while blowing tubes.**	
MISCELLANEOUS	
Inspect Oil Lab, sampling equipment and chemical injection systems.	
Complete Open and Inspect List and give a copy to the Engineer Officer.	
Establish arrival time for BR Inspector on Day 3.	

AUXILIARY BOILERS (BR)
OPEN AND INSPECT
AOE 6

EQUIPMENT	NUMBER INSTALLED	NUMBER INSPECTED	INSPECT
BOILER FIRE SIDES	2	1	- Firebox. - Air casing.
BOILER WATERSIDES	2	1	- Steam drum. - Water drum.
BOILER MISCELLANEOUS	2	1	- Hand-easing gear on boilers not checked during Pre-Underway Phase. - Open soot blow system constant drain valve to inspect permanent drain hole. - Remove pneumatic reducing station filters. - Inspect sliding feet fasteners.
FEED PUMPS	2	1	- Open the liquid end and remove the rotating element from the pump end. Measure and record all wearing ring clearances.
FUEL OIL STRAINERS	2	1	- Drain, but do not clean strainer/filter housings and elements.
FEED WATER STRAINERS	2	1	- Drain, but do not clean strainer/filter housings and elements.

ELECTRICAL (EL)
PRE-UNDERWAY PHASE
AOE 6

SHIPS SERVICE DIESEL GENERATORS	
Test Dead Bus Pick-Up	
Test Reverse Power Relays	
Test Parallel Operation	
Test Load Shedding (automatic)	
ELECTRICAL PLANT CONTROL CONSOLE (EPCC)	
Test Indicating Lights and Alarms	
400 HERTZ CONVERTERS	
Test Split And Parallel Operation Of Converters	
Test Door Shunt Trips	
400 HERTZ MOTOR GENERATOR SETS	
Test Split and Parallel Operation	
UNINTERRUPTED POWER SUPPLY (UPS)	
Test Operate Unit On Batteries NOTE: All Consoles	
GYROCOMPASS SYSTEM (WSN 2/5)	
Test Operate Unit on Battery	
Test Synchro Amplifier And Repeater Accuracy	
Check External of IMU Storage Container	
TELL-TALE PANEL & NAVIGATION SIGNAL LIGHT PANEL	
Conduct Operational Test	
Measure Insulation Resistance Of Electrical Circuits	

ANNOUNCING SYSTEMS	
Test General, Chemical, And Collision Alarms From All Stations	
Test 1MC From All Stations	
Test 5MC Operation	
Test 6MC Operation	
Test 21MC Operation	
DEGAUSSING SYSTEM	
Conduct Linearity Test	
Inspect Degaussing Folder	
AUTOMATIC BUS TRANSFER EQUIPMENT	
Conduct Operational Test In Manual And Automatic)Of All Main And Auxiliary Space Vital and Lighting ABTs	
EVAPORATORS	
Test Dump Valve Operation And Alarm Settings	
DEAD RECKONING SYSTEM	
Conduct DRT Accuracy Test	
Conduct DDRT Accuracy Test	
Conduct Dead Reckoning Analyzer Indicator (DRAI) Test	
UNDERWATER LOG SYSTEM	
Measure Rodmeter Coil Resistance	
WIND INDICATING SYSTEM	
Test System For Proper Operation	
CATHODIC PROTECTION SYSTEM	
Inspect Logs and Operation of System	
Inspect Shaft Grounding Assembly	

THERMAL IMAGING SURVEY	
Commence Thermal Imaging Survey Throughout The Ship **NOTE:** Engineering vital equipment for getting underway will be surveyed first. Any controller, distribution fuse box, power panel and ABT surveyed above ambient temperature of 49 degrees centigrade and above must be repaired prior to getting underway.	

ELECTRICAL (EL)
UNDERWAY PHASE
AOE 6

NOTE: Electrical Underway Checks Consist Mainly Of Space Walk-Through Throughout The Ship And Thermal Imaging Survey

In each space inspect the following if applicable:

ELECTRICAL SAFETY	
Were flat irons a high-grade commercial type with a three pronged cord?	
Were Ironing Board Stations in berthing space modified to remove spotlight and fill the access hole? Ensure irons are not hardwired.	
Have electronic and electrical shorting probes been modified by installing a nylon screw in the end of the probe and soldering the clip to the conductor?	
Are portable tools/devices not stamped "Double Insulated" or equipped with a three pronged cord?	
Were Hospital grade plugs used on portable equipment?	
FUSE BOXES	
Are fuses pulled from designated circuits without danger tags affixed?	
Are there loose or missing locking nuts or gear adrift?	
Are circuits properly labeled for easy identification?	
Are there any bent, twisted, misaligned, or broken fuse clips?	
Is the interior rusty or dirty?	
Are fuses of the correct amperage and voltage installed?	
Are circuits fed from one set of fuses (except battle lantern circuits) multiple?	

FUSE BOXES	
Are fuse clips phosphor-bronze instead of silver plated?	
Were door hinges broken?	
Are non-silver ferruled fuses installed?	
Are SHAWMUT "AMP-TRAP" current limiters installed in place of fuses?	
Is clearance provided to permit complete accessibility for maintenance, repair, renewal of fuses, and testing?	
Depress ground detector push buttons, were any grounds indicated?	
POWER PANELS	
Were access holes left in panels after removal of circuit breakers?	
Do labels specify the proper information?	
Do Breaker ratings match the circuit label current rating?	
Are multi-phase circuits missing breaker connecting handles?	
Were power panels located inside galley spaces?	
Is clearance provided to permit complete accessibility?	
MOTOR CONTROLLERS	
Were interiors dirty, rusty, deteriorated, or contained gear adrift?	
Were wiring diagrams, schematics or overload heater tables missing?	
Was controller electrical wiring properly banded?	
Were Start, Stop, "Emergency Run" or Reset buttons seized, missing or inoperative?	
MOTOR CONTROLLERS	

Were rubber boots cracked, torn or missing?	
Were overload relay heaters properly sized and adjusted to provide adequate protection for the motor?	
Were switches protected against inadvertent activation?	
Were controllers with multiple power sources properly labeled?	
Were controllers and remote operating stations properly labeled?	
Is clearance provided to permit complete accessibility for operation, maintenance, repair, renewal of fuses, and testing?	
LIGHTING	
Were darken ship switches operative and adjusted properly?	
Were light fixtures, guards, and covers securely mounted?	
Were over-sized lamps installed in lighting fixtures?	
Were light fixtures missing lenses, protective guards, or faceplates?	
Were spray-tight fixtures adequately protected against water intrusion?	
Did diesel module room have adequate lighting?	
Was bunk lighting cable hanging, or not routed through the inside of bunk stanchions?	
Were plastic-cased bunk light reflectors and toggle switches properly grounded?	
BATTLE LANTERNS	
Were relay-operated lanterns installed in sufficient number?	
BATTLE LANTERNS	
Are lanterns installed with suitable bracket assemblies to prevent removal of lantern?	

Were lanterns inoperative?	
Were test switches and relay frames grounded?	
Were lanterns using “TYMAC” relays installed?	
CABLING	
Was PVC cabling installed (new construction only)?	
Were dead-ended cables properly identified/terminated?	
Were useless or improperly installed cables removed?	
Was cabling properly supported, routed or were nylon wire ties being utilized?	
Were cables pulling out of equipment?	
Were cables improperly spliced?	
Were cables protected against being handholds or being stepped on?	
Was cabling run through beams without the use of chaffing rings?	
Was cabling running through metal partitions equipped with grommets?	
Was cabling on weather decks and engineering spaces deteriorated?	
Were cable stuffing tubes properly assembled ?	
Were multiple cables running through one stuffing tube?	
Were multi-cable penetrators installed in Flammable Liquid Storerooms?	

CASUALTY POWER CABLES	
Were cable ends properly terminated?	

Were cables deteriorated from age, heat, and humidity?	
Were normally energized power terminals labeled?	
Were racks properly identified as to number/length of cables assigned to the rack?	
Is there a label attached at the end of the cable to indicate the length and stowage rack number?	
Are cable leads properly identified for phase identification?	
Was miscellaneous gear stowed on casualty cable racks?	
Were cable ferrules missing or heavily oxidized?	
Was an improper number/length of cable installed on a cable rack?	
Were wrenches missing from terminals?	
Were covers installed on power terminals?	
WORKBENCHES	
Was the electrical workbench properly installed, to include: - Front panel, Side Panel, Back panel and Kneehole Insulation. - Disconnect Switch properly installed and labeled. - 48 inches ground strap for every 4 feet of workbench. - 5KVA isolation transformer installed. - Safety Placards.	

BATTERY LOCKERS	
Was a Battery Log maintained?	

Is there an electrical interlock between exhaust ventilation and battery charger?	
Are Alkaline and Lead Acid Batteries being serviced in the same facility?	
Is each locker provided with: - Rubber Gloves and Aprons. - Goggles. - Two battery fillers. - Two battery test sets. - One soda water container	
Does the locker contain an eye wash station and a deluge shower?	
Are battery storage racks greater than 12 inches between tiers?	
Were battery hold-down clamps provided?	
Are Acids stored in appropriate protective containers?	
Are battery charger plugs and jacks marked NEG. and POS.?	
SHORE POWER	
Is shore power being properly rigged?	
Did shore power shunt trip interlocks trip its associated breakers when tested?	
Was shore power system cabling between the receptacles and the ship's switchboard insulation resistance within EOSS or PMS limits?	
Were shore power indicating lights operative, white in color, and all screws installed?	
Was there pigtail stowage installed?	
SHORE POWER	

Does the shore power system meet the current standards: - Have a Viking Connector System. - Have AQB-LF 400 Amp Circuit Breaker with shunt trip. - Have phase sequencing and phase orientation devices. - Have power available lights at switchboard and shore power connection box. - Have installed ammeter and selector switch to monitor total shore power current.	
BUS TRANSFER EQUIPMENT	
Were Automatic Bus Transfer Devices operating properly?	
Were ABT's installed for the following: - Emergency Lighting. - IC Switchboard and panels. - Steering power panel. - Pumps associated with the main and auxiliary machinery plant having Low Voltage Release (LVR) control. - Fire pumps. - Fire extinguishing auxiliaries and controls. -	
Did ASCO ABT transfer switches have an electrical charge on the metal screw on the manual operator?	
Was the sliding interlock on manual bus transfer switches effective at preventing both breakers from being closed at the same time?	
Are feeder circuit breaker megger holes blanked off?	
Were Normal/Alternate source indicating lights operative?	
ELECTRICAL DISTRIBUTION EQUIPMENT	
Was electrical distribution equipment securely mounted?	
Electrical distribution equipment have loose or missing covers?	
Were control knobs or fasteners missing from electrical equipment?	
ELECTRICAL DISTRIBUTION EQUIPMENT	

Was electrical equipment protected from water intrusion?	
Is electrical properly mounted or was it suspended solely by electrical cables?	
Were 440 multipurpose outlets properly phased?	
Did Standard Navy Receptacles (SNR) and Multi-Purpose Outlets (MPO) have an interlock switch or was the switch function such that the plug could not be removed from an energized receptacle?	
Were electrical receptacles broken or damaged?	
Were 400HZ AC, 60HZ AC, and DC convenience outlets labeled to prevent equipment being used with the wrong frequency?	
MOTORS	
Were motor foundations properly preserved?	
Was resilient mounted electrical equipment grounded to the ships hull through ground straps?	
Did electrical rotating machinery have ball check grease fittings (zerk fittings) installed?	
Were coupling, belt, or chain guards effective?	
MISCELLANEOUS EQUIPMENT	
Is permanently mounted electrical equipment hardwired to the ships electrical system?	
Is hardwired electrical equipment permanently mounted?	
Was more than 1 multi-purpose power strip connected to one isolated receptacle circuit?	
Were Surge Protectors of the approved type?	

MISCELLANEOUS EQUIPMENT

Is electrical equipment mounted on non-conductive surfaces properly grounded?	
Are portable electric device power cords properly tinned?	
Are permanent-type safety precautions, operating instructions, high voltage warning signs, and resuscitation instructions installed where required?	
Is stowage in the electrical division adequate?	
Did electrical connection boxes have knockouts pushed in leaving open access holes In the side?	
Are non-watertight connection boxes being used in engineering spaces?	
Was rubber matting oil soaked, cracked, punctured, perforated or had imbedded metal or conductive particles?	
Did varnish Dip Tank meet installation specifications? - No heat source within eight feet of tank. - Tank was fitted with explosion proof dedicated exhaust ventilation system. - Space ambient temperature was below the flashpoint of varnish (78 degrees Fahrenheit). - A portable AFFF fire extinguisher was installed	
Was accommodation ladder lighting of the proper typed? (Not to use dress ship lights attached to gangway handrails)?	
Did dress ship lights have broken, missing, or incorrect guards?	
Were dress ship light receptacles labeled "Dress Ship Light Streamers. Not to be used for any other purpose"?	
Were panel switches controlling circuits that are de-energized during darkened ship operation marked DARKENED SHIP?	
MISCELLANEOUS EQUIPMENT	

Had the float charge on the UPS batteries been reduced from 135vdc to 129vdc?	
Was UPS electronic cabinet bottom sealed to prevent water of oil entry from lower level engine room?	
Did engine room control console have three sources of power (normal, alternate, no-break)?	
Were bulkhead mounted electric heaters provided with protective screens?	
Were Electrical/IC test panels degraded or inoperable?	
Did bracket mounted fans have a blade guard which would permit personnel to come in contact with the rotating blades?	
GYROCOMPASS EQUIPMENT	
Did the master and auxiliary compass shifted to the standby battery power source upon the loss of the normal supply?	
Did the gyrocompass power supply fluctuate?	
s the gyrocompass control cabinet or master compass erior dirty, corroded, or missing hardware?	
Did gyrocompass repeaters indicate the correct azimuth?	
Was there any corroded or missing hardware?	
Were Synchro Signal Amplifiers operable/properly adjusted and transmission checks correct?	
WSN INERTIAL GUIDANCE UNIT	
Did the WSN Inertial Guidance Unit shift automatically to the standby power supply upon the loss of the normal supply?	
Was a spare IMU and mounting case provided for the WSN Inertial Guidance System?	
UNDERWATER LOG SYSTEM	

Inspect the Rodmeter Hoist and or Sea Valve for the following: - Was Hoist/Sea Valve difficult to operate? - Did the Sea Valve leak? - Was an interlock installed/operative. - Were Raise/Lower, Open/Shut indicators installed? - Were the operating instructions posted?	
Did the ship have a spare pit sword?	
CATHODIC PROTECTION SYSTEM	
Was the installed Cathodic Protection System operative and adjusted IAW PMS?	
Were the rudder grounding straps made of 1-1/2 inch wide braided copper and brazed to the rudder stock and the hull?	
Were shaft grounding brushes correctly installed?	
Shaft grounding brushes exhibit full contact with the slip ring?	
Was brush rigging correctly installed?	
SHIP TELEPHONE SYSTEM	
Was the system unreliable due to unresolved software or hardware deficiencies?	
SOUND POWERED TELEPHONE SYSTEMS	
Were Sound Powered Telephone Circuit Amplifiers missing or inoperative?	
Were any Sound Powered Circuits below 50,000 ohms resistance to ground?	
Were Sound Powered Call Signal Stations (growlers) inoperative, corroded, damaged or missing parts?	
Were Sound Powered Jackboxes improperly labeled, corroded, damaged, or missing parts?	

ALARM SYSTEMS	
Perform alarm switchboard and panel PMS	
Were any alarm and warning systems inoperative or missing parts?	
Were Air Flow Alarms operating properly, was the alarm set point properly set, and was the alarm set point posted at the alarm panel?	
ORDER/INDICATING/METERING SYSTEMS	
Were Tank Level Indicators (TLI's) out of calibration or inoperative?	
Were valve position indicator circuits misadjusted or inoperative?	
Were Salinity System alarm setpoints properly adjusted? Were dump valves operating properly?	
Were there missing or inoperative salinity cells?	

ELECTRICAL (EL)
OPEN & INSPECT PHASE
AOE 6

EQUIPMENT	NUMBER INSTALLED	NUMBER INSPECTED	REMARKS
Ship Service Diesel Generator (SSDG)	5	2	Remove covers and inspect the following: - ground readings of stator a rotor windings - oil leaks on pedestal bearing seal - oil-soaked stator and rotor - dirt, debris, gear adrift, co and oil on generator terminal box
Ship Service Generator Circuit Breaker	5	2	Rack out circuit breaker and inspect the following: - misaligned main or auxiliary contacts - excessively pitted main or auxiliary contacts - signs of corrosion or overheating of circuit breaker sockets - loose connections - adequate lubrication on circuit breaker - tools necessary to maintain breaker - cleanliness
EQUIPMENT	**NUMBER INSTALLED**	**NUMBER INSPECTED**	**REMARKS**
S/S Generator Static Exciter	5	2	Remove covers and inspect the following: - installed "DO NOT MEGGER" warning signs on exciter rectifiers, static regulators and power supply rectifiers to warn personnel of potential damage to electronic components if meggered - loose connections - cleanliness
Ship Service Switchboard	5	1	Remove covers as directed by Inspector and inspect the following: - Bus Bars closest to the rear panel stenciled "Danger 450 Volts" - Bus Bar connections double-nutted or secured properly - threaded fasteners for Bus Bars connections showing less than one thread or more than 5 threads - gear adrift - internal wiring adequately secured to frame to prevent chafing of insulation - cables lying on, or contacting Bus Bars - non-silver plated fuses - broken circuit breaker handles preventing rapid securing of major equipment

EQUIPMENT	NUMBER INSTALLED	NUMBER INSPECTED	REMARKS
Ship Service Switchboard (cont'd)	5	1	- fuses of correct voltage and amperage rating - covers for manual operator enclosures secured with screws which did not allow quick access in event of casualty - saltwater lines installed over top of switchboards not properly shielded - supply vent ducts directed at the SWBDs, allowing water spray or dust to enter SWBD - bottom of SWBD shielded to prevent water, oil or steam vapors from entering - electrical connection tightness

EQUIPMENT	NUMBER INSTALLED	NUMBER INSPECTED	REMARKS
IC Switchboard	2	2	Open door panels as directed by Inspector and inspect the following: - internal wiring adequately secured to frame to prevent chafing of insulation - non-silver plated fuses - broken circuit breaker handles preventing rapid securing of equipment - fuses of correct voltage and amperage rating - electrical connection tightness - electrical meter condition and calibration due date
Degaussing Power Supplies	4	4	Open door panels and inspect the following: - fuses of correct voltage and amperage rating - non-silver fuses - condition of internal components - condition of electrical meters and calibration due dates - cleanliness

EQUIPMENT	NUMBER INSTALLED	NUMBER INSPECTED	REMARKS
Degaussing Control Switchboard	1	1	Remove covers and inspect the following: - fuses of correct voltage and amperage rating - non-silver fuses - sign of corrosion and overheating of components - loose connections - cleanliness
Degaussing Through Boxes	-	2	Remove covers and inspect the following: - cables - cable connections - cleanliness **NOTE**: One from fwd part of the ship and one from aft part of ship
400HZ SFC	3	3	Remove covers and inspect the following: - signs of corrosion and overheating of components - fuses of correct voltage rating and amperage - condition of electrical meters and calibration due dates - cleanliness - loose wiring -

EQUIPMENT	NUMBER INSTALLED	NUMBER INSPECTED	REMARKS
400HZ Motor-Generator Set	2	2	- measure motor generator insulation resistance - condition of brushes and brush rigging assembly - cleanliness
Ship's Dial Telephone System	1	1	Remove covers and inspect the following: - fuses of correct voltage and amperage rating - loose connections - sign of corrosion and overheating of components - spare parts inventory - cleanliness
Gyrocompass/ WSN	2	2	- inspect condition of components - cleanliness
DRT / DRA / DRAI / NC-2	1	1	Remove covers, inspect condition of internal components and cleanliness
Cathodic Protection Power Supplies	--	2	Remove covers, and inspect the following: - fuses of correct voltage and amperage rating. - loose connections - sign of corrosion and overheating of components - condition of electrical meters and calibration due dates - cleanliness

EQUIPMENT	NUMBER INSTALLED	NUMBER INSPECTED	REMARKS
HE/HD Master Transmitter	1	1	- inspect condition of components - cleanliness

MAIN PROPULSION (MP)
PRE-UNDERWAY PHASE
AOE 6

MAIN ENGINES	
Conduct GTMI	
Test GTM Fire Extinguishing System	
Conduct LP Air Start and GTM Idle Checks	
Conduct HP Air Start and GTM Idle Checks	
Test Blow in Doors	
Intake Plenum	
Intake Dirty Side	
Demister Pads/Gaskets/Frames	
LOSCA Oil Level	
LOSCA Lock Wire	
REDUCTION GEARS	
Sump Level	
Lube Oil Condition	
Gear Teeth	
Lube Oil Spray Pattern	
Casing Interior	
Oil Flow in SFI's	
Temperature Gauges	
Casing Exterior	
Foundation	
Vent Fog Precipitator	
Dehumidifier	
Test Shaft Turning Gear	
Test GTM PT Brake Assemblies	
LINE SHAFT BEARINGS	
Sump Level	
Sump Drain Valve	
Seals	
Thermometer	
Lubricator	
Dip Stick	
Lock Wires	
Bearing Depth Mic Surface	
Foundation	

STERN TUBE SEALS	
Gauges	
Cooling Water Piping	
Cooling Water Strainer/Filter	
Test Cooling Water Low Flow Alarm	
LP Air Supply	
LP Piping/Hoses/Fittings	
CO2/N2 Bottles/Piping/Fitting	
Test Inflatable Seal	
Emergency Flax Packing Kit	
Backing Ring	
RCC SYSTEMS	
Sump Level	
Oil Condition	
Casing	
Filters/Strainers	
Test Differential Pressure Alarms	
Test Electric Pump	
LUBE OIL SYSTEMS	
Test RRG Lube Oil Sequencing	
Test Electric RRG Lube Oil Pump	
Attached RRG Lube Oil Pump	
Lube Oil Strainer Baskets	
Test Filter Shifting Interlock Device	
Test Differential Pressure Alarm	
Conduct Manual Test of Temp Regulating Valve	
Conduct Manual Test of Unloading Valve	
Lube Oil Purifier and Heater	
FUEL OIL SYSTEMS	
Purifier	
Test Booster Pumps	
Conduct Fuel Oil Pump Sequence/Logics	
Filters/Strainers	
Coalescers/Prefilters	
Test Differential Pressure Alarms	
Fuel Oil System Control Console	
Test Service Tank Suction Valves	
Test Service Tank Recirc Valves	
Test Quick Closing Valves	
Test GTM Fuel Oil Solenoid Trip Valves	

CONTROLS	
Test EOT Indicator	
Test PACC Alarms and Indicators	
Test SCU Alarms and Indicators	
Conduct Console Self Test	
Bell Logger	
Test EOT Wrong Direction Alarm	
Conduct MCS Checks	
Conduct IEC Checks	
Torsionometer	
EMCU	
HULL STRUCTURE	
Bilges	
Bilge Suction Screens	
Deck Plates	
Equipment Foundations	
Paint and Preservation	
Pipe Brackets/Hangers	

FULL POWER AND QUICK REVERSAL DEMONSTRATION	
Demonstrate Auto Plant Mode Logic (Split plant to Full Power)	EOSS
Demonstrate Full Power ahead (1 hour)	PMS/EOSS/POG/9094.1B
Demonstrate Quick Reversal Astern	POG/Full Power Memo/EOSS
Demonstrate Full Power Astern (15 Min)	POG/Full Power Memo/EOSS
Demonstrate Quick Reversal Ahead	POG/Full Power Memo/EOSS
LUBE OIL PURIFIER DEMONSTRATION	
Demonstrate purifier operation	EOSS/PMS
FUEL OIL TRANSFER DEMONSTRATION	
Demonstrate fuel oil purifier (s) operation	EOSS/PMS
Demonstrate purifier (s)emergency stop capability	EOSS/PMS/Tech manual

MAIN PROPULSION (MP)
UNDERWAY PHASE
AOE 6

MAIN PROPULSION (MP)
OPEN AND INSPECT PHASE
AOE 6

EQUIPMENT	NUMBER INSTALLED	NUMBER INSPECTED	INSPECT
LM2500	4	2	- GTRB waterwash "Y" strainer - Starter lube oil - Starter stator/turbine blades - Lube oil scavenging pump inlet strainers/magnetic drain plugs - Lube oil scavenge filters - Lube oil supply filter - Turbine bellmouth waterwash spray nozzles - Inlet plenum/screen - Inlet duct bellmouth/centerbody - Fuel filters - Flame arrester - Exhaust Duct - Special support tools and test equipment
MAIN REDUCTION GEAR/RCC	2	2	- Spray nozzles/gears - Attached lube oil pump drive gears - Attached lube oil pump drive gears - Main thrust bearing oil seal clearance - Dehumidifier filters/bearing wheels - Vent fog precipitator
SHAFTING	2	1	- Bulkhead seal assembly - Line shaft bearing clearance - Line shaft bearing lube oil sump - Line shaft bearing spare
LUBE OIL FILL AND TRANSFER SYSTEMS	2	1	- Lube oil inlet strainer - Purifier bowel assembly - Purifier drive spindle - Purifier paring disc height/pressure - Purifier drive belt assembly - Freshwater 5 micron filter - Inventory lube oil purifier special tools
FUEL OIL SERVICE AND TRANSFER SYSTEM	2	1	- Coalescer filters - Fuel oil purifier drive gear - Fuel oil purifier bowl assembly - Fuel oil purifier lube oil sample - Fuel oil purifier freshwater filter - Fuel oil service pump shaft alignment - Inventory fuel oil purifier special tools
BLEED AIR SYSTEMS	1	2	- Bleed air cooler zinc plugs - Cooler seawater side - Start air filters - Cooler separator and low point drain orifices - GTM bleed air valves